

Ton Duc Thang University Center for Applied Information Technology



Course Lecture

FUNDAMENTALS OF INFORMATICS 2

Website: cait.tdtu.edu.vn

Facebook: https://facebook.com/trungtamtinhoc



Course Materials

• Textbooks:

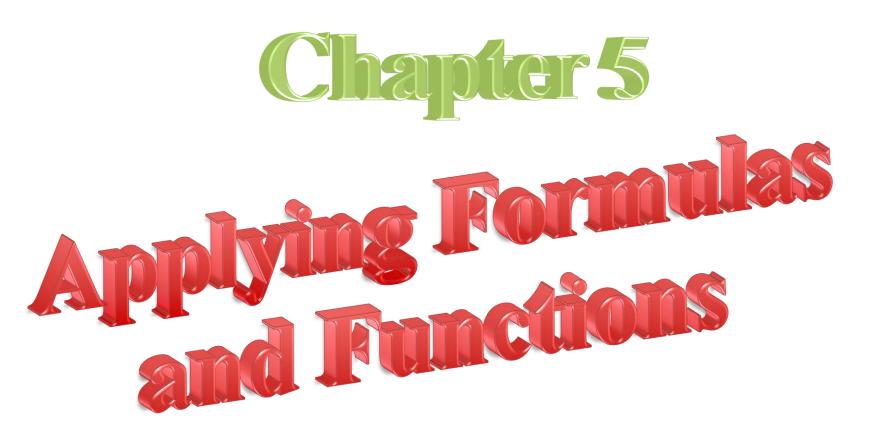
Joan Lambert, MOS 2016 Study Guide for Microsoft Excel,
 2017.

• References:

- Joan Lambert, MOS 2016 Study Guide for Microsoft PowerPoint, 2017.
- John Wiley, Microsoft Official Academic Course, Microsoft Word core 2016, 2016.

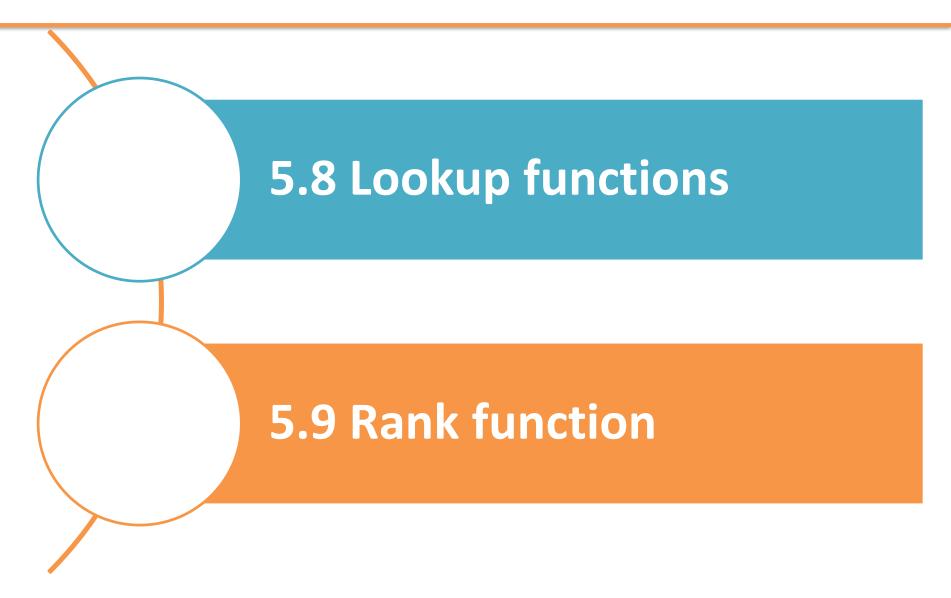


Ton Duc Thang University



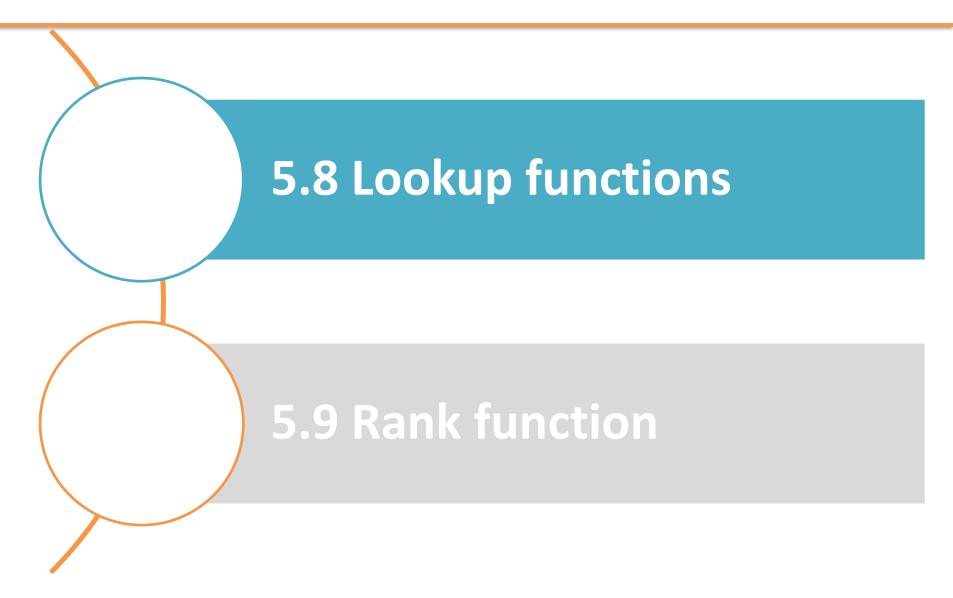


To Be Chapter 5. Applying Formulas and Functions





Chapter 5. Applying Formulas and Functions Total Control of the Applying Formulas and Functions





- VLOOKUP function

+ Syntax:

VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])

+ Arguments:

- lookup_value: The value to look for in the first column of a table.
- table_array: The table from which to retrieve a value
- col_index_num: Column index in the table that has value to return
- range_lookup: Lookup option (*false*: exact match; *true*: approximate match).
- + Task: Looks up a supplied value in the first column of a table, and returns the corresponding value from another column.



- VLOOKUP function (cont):

+ *Notice*:

- The first column on the lookup table is numbered 1. **col_index_num** is a column ordering of which contains the return value in the lookup table.
- To copy the formula containing lookup functions, you have to apply an absolute reference to the lookup table (press F4 button).
- In case the lookup option is TRUE, the values in the first column have to be sorted in ascending order.



- Example: Fill data for the TÊN SP and ĐƠN GIÁ columns

4	A	В	С	D	Е	F					
4	PHIẾU GIAO NHẬN										
5	MÃ SP	Số LƯỢNG	TÊN SP	ĐƠN GIÁ	KHUYÉN MÃI	THÀNH TIỂN					
6	XB	19			3						
7	XS	5			1						
8	TL	16			3						
9	XB	12			3						
10	XS	8			1						
11	TL	1			0						
12					Tổng cộng:	?					
13											
14		BÅNG TRA C	ÚU		BẢNG THỐNG KÊ 1						
15	Mã SP	Tên SP	Đơn giá		Mã SP	Tổng Thành Tiền					
16	XB	Xà bông LifeBoy	4200		XB	?					
17	XS	Súp Knor	1000		XS	?					
18	TL	Trà lài	4350		TL	?					

Enter formula in cell C6

=VLOOKUP(A6,\$A\$16:\$C\$18,2,FALSE)

Enter formula in cell D6

=VLOOKUP(A6,\$A\$16:\$C\$18,3,FALSE)



- Example (cont): Fill data for the **Đơn giá** column

1	A	В	С	D	E	F	G	Н			
7	BẢNG TÍNH TIỀN KHÁCH SẠN										
8	Tên KH	Quốc tịch	Mã Phòng	Ngày đến	Ngày đi	Số ngày ở	Đơn giá	Tiền phòng			
9	Kim	Korea	L1A-F1	9/21/2018	9/25/2018	4					
10	Nam	Korea	L1B-F2	9/10/2018	9/15/2018	5					
11	Hùng	Việt Nam	L1C-F1	9/25/2018	9/30/2018	5					
12	Minh	Việt Nam	L2A-F2	9/12/2018	9/20/2018	8					
13	David	Pháp	L1A-F1	9/11/2018	9/15/2018	4					
14	John	Mỹ	L2A-F2	9/16/2018	9/26/2018	10					
15											
16		BÅNG Ð	ON GIÁ								
17		Lầu	Đơn giá								
18		Ll	40								
19		L2	35								
20		L3	30								

Enter formula in cell G9 = VLOOKUP(Left(C9,2),\$B\$18:\$C\$20,2,FALSE)



- HLOOKUP function

+ Syntax:

HLOOKUP(lookup_value, table_array, row_index_num, [range_lookup])

+ Arguments:

- lookup_value: The value to look for in the first row of a table.
- table_array: The table from which to retrieve a value
- row_index_num: Row index in the table that has value to return
- range_lookup: Lookup option (*false*: exact match; *true*: approximate match).
- + Task: Looks up a supplied value in the first row of a table, and returns the corresponding value from another row.



- HLOOKUP function (cont):

+ *Notice*:

- The first row on the lookup table is numbered 1. **row_index_num** is a row ordering of which contains the return value in the lookup table.
- To copy the formula containing lookup functions, you have to apply an absolute reference to the lookup table (press F4 button).
- In case the lookup option is TRUE, the values in the first row have to be sorted in ascending order.



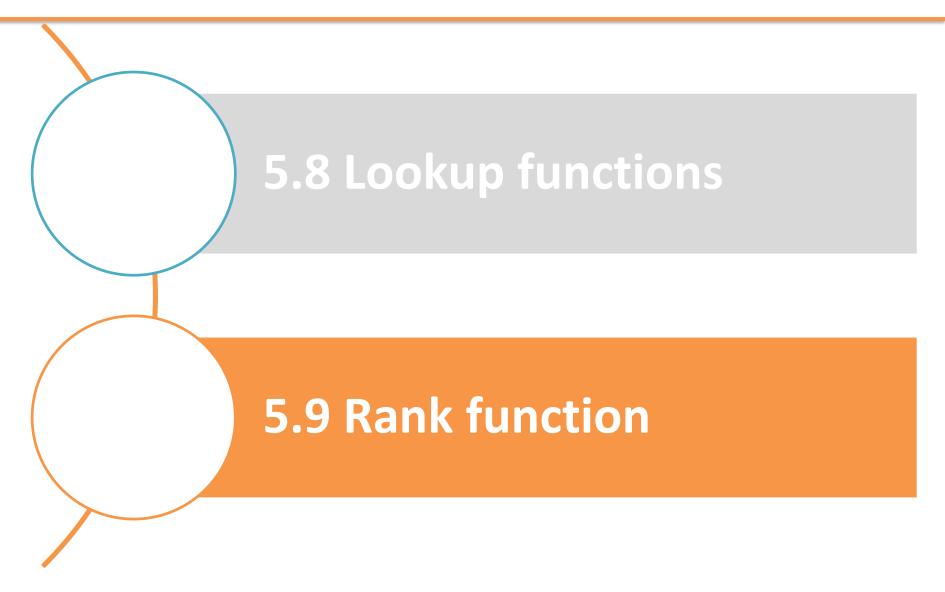
- Example: Fill data for the **Đơn giá** column

1	A	В	С	D	E	F	G	Н	I	
7										
	Tên KH	Quốc tịch	Mã	Ngày đến	Ngày đi	Số	Đơn	Tiền		
8		Quoc iica	Phòng			ngày ở	giá	phòng		
9	Kim	Korea	L1A-F1	9/21/2018	9/25/2018	4				
10	Nam	Korea	L1B-F2	9/10/2018	9/15/2018	5				
11	Hùng	Việt Nam	L1C-F1	9/25/2018	9/30/2018	5				
12	Minh	Việt Nam	L2A-F2	9/12/2018	9/20/2018	8				
13	David	Pháp	L1A-F1	9/11/2018	9/15/2018	4				
14	John	Mỹ	L2A-F2	9/16/2018	9/26/2018	10				
15										
16	BẢNG ĐƠN GIÁ							BẢNG THỐNG KÊ		
		Lầu	L1	L2	L3			Loại	TỔNG TIỂN	
17		Lau	LI	L2	LS			phòng	PHÒNG	
18		Đơn giá	40	35	30			Ll		
19								L2		

Enter formula in cell G9 = HLOOKUP(Left(C9,2),\$C\$17:\$E\$18,2,FALSE)



Chapter 5. Applying Formulas and Functions Total Control of the Applying Formulas and Functions





5.8- Rank function

- RANK function:

+ Syntax:

RANK(number, ref,[order])

- + Arguments:
 - number: number to rank.
 - ref: data range contains an array of numbers including the number to rank.
 - order: A number specifying how to rank number
 - + 0: ranks number as if ref were a list sorted in descending order.
 - + 1: ranks number as if ref were a list sorted in ascending order..
- + Task: Returns the rank of a number in a list of numbers.



5.8- Rank function

- Example:

4	A	В	C	D	Е	F	G	Н	I			
4	DANH SÁCH THI TUYỂN											
5	MSSV	TÊN THÍ SINH	NGÀV SINH	NHẬP ĐIỂM		I Ý THUVÉT	THỰC HÀNH	ÐTB	Xếp hạng			
6	MISSV		NGÀY SINH	LT	TH	LITHUIEI	III ÇC HAMI	ИГВ	Aep nang			
7	A001	Nguyễn Thái Nga	10/25/2000	45	75	4.5	7.5	6				
8	B001	Trương Ngọc Lan	2/24/2001	4	4.5	4	4.5	4.25				
9	A002	Lý Cẩm Nhi	6/6/1990	56	56	5.6	5.6	5.6				
10	B003	Lưu Thủy Nhi	7/14/1995	7.5	6.5	7.5	6.5	7				
11	B004	Trần Thị Bích Tuyên	12/5/2002	89	80	8.9	8	8.45				
12												

Enter formula in cell I7: =RANK(H7,\$H\$7:\$H\$11,0)



To Be Chapter 5. Applying Formulas and Functions

